

GREEN MATTERS

A newsletter from the Alberta Environmentally Sustainable Agriculture Council

Tailoring Your Plans to Your Changing Needs

From AESA
Council's
Chair

*by Bruce Beattie,
Alberta Milk Producers*



Watching the sunrise on another beautifully clear winter day, with temperatures near freezing, should warm the heart of anyone. But recalling last year's drought, I cannot help but wish for clouds and snow. In spite of advances in technology, we farmers continue to have our work dictated by weather and climate. Like no other job, the weather determines what I do today, the climate, how I plan for the future. The political climate also affects our operations, influencing our daily activities and our plans.

Last year, the Alberta Environmentally Sustainable Agriculture (AESA) Council adopted the Environmental Farm Plan (EFP) as being central to our program. We believe this voluntary, confidential self-assessment process can provide Alberta producers with the tools for practical, cost-effective environmental stewardship, even given adverse weather or new regulatory requirements.

The EFP has several key elements that I think will make it a success. It is built on experience from other provinces, particularly Ontario, where an EFP program has been in place for over 10 years. The EFP steering committee has a very broad representation from the industry, including active producers. As well, the program is being developed with full participation of farmers, including the current pilot process as they "try on" the program to ensure it is practical and effective.

And the EFP process isn't just a one-size-fits-all approach. It's tailored to meet individual needs. It is based on a series of checklists that cover everything from pesticide management, to manure hauling, to energy efficiency. A participating producer uses only those checklists that relate to his own operation. These checklists identify the areas where he is already doing a good job in dealing with environmental considerations and where he needs to make changes. Then the producer develops his plan to address any concerns in a way that fits with the needs of his operation.

Finally, the voluntary and confidential nature of the program means that the producer owns his plan. He decides what he will do, when he will do it, and who will see the plan. Although the EFP process helps him determine how to address regulatory requirements, it is not part of the regulatory process. Concerns have been expressed about liability related to having an EFP. The demonstration by an operator of an active environmental program is the best defence against any complaint that might arise.

Having an EFP is one way that we as producers can prove to society that we are prepared to do our part in protecting the environment. In turn, society must be prepared to shoulder a significant share of that responsibility as all citizens benefit from the safe, abundant and low-priced food supply Canadians enjoy.

WHAT'S INSIDE

Issues & Innovative Solutions
in Central Alberta

Changing Practices & Views
in the North West

Balancing Stewardship &
Economics in the South

Council Profiles:
Charles Rypien
& John Tackaberry

Environmental Farm Plans:
A Link to Individual Needs

Issue No. 10, Winter 2002

Diverse Issues & Innovative Solutions in the Central Region

The Central Region runs from the foothills to the prairies of central Alberta. And its stewardship issues range from watershed management, to forage, grazing and riparian management, to confined feeding operations, to crop management. Ken Ditzler, chair of AESA's Central Farm Based Committee says the Farm Based Program's new three-year planning approach and its increased emphasis on partnerships are helping local agencies to better address these wide-ranging concerns.

"Partnerships for increased manpower are especially important," notes Annette Svederus. She is the regional conservation coordinator with Alberta Agriculture, Food and Rural Development in Lacombe.

"Extra manpower can help accelerate a group's progress."

She says, "In recent years, we've seen how extra manpower can help accelerate a group's progress. For instance, the AESA-funded watershed coordinator position with the

Mountain View Waterways Restoration Group plays a valuable role in this proactive producer group." As watershed coordinator, Ken Lewis helps organize the group's activities, provides advice on watershed issues, and links individuals and the group with other resources (see box right). He says, "I do a lot of the behind-the-scenes stuff, so the volunteers can go about their business farming."

Ditzler says a major barrier to adoption of environmentally sound practices is 'producers' concern over the cost of changing their practices and implementing new practices. He says, "We need to demonstrate the value of those practices and ways to implement the practices over a period of time without major costs to their operation." As well, some agencies, like the Mountain View group, are building on their AESA-funded technology transfer activities by providing assistance from other sources for stewardship projects on individual farms.

For more information on AESA Farm Based projects in the Central Region, contact: Annette Svederus or Christine Sweet at 403-782-3301.

Trend-setting action on water quality

The Mountain View Waterways Restoration Group is leading the way on water quality in Mountain View County.

This producer-driven group formed about two years ago when study results indicated potential water quality concerns in the area. Producers immediately decided to work on minimizing their own impacts on water quality in the County's watersheds. And now they're bringing in other stakeholders, so jointly they can do even more to protect water quality.

Watershed coordinator Ken Lewis says the group has three main roles: education and awareness on agricultural practices to protect water quality; 'on-the-ground' projects on farms; and building relationships with other stakeholders. AESA has provided support for the first role, funding such activities as an annual waterways tour and a workshop on riparian health assessments.

The group also provides funds for materials and other assistance to farmers to get projects "happening on the ground", says Lewis. A recent project involved fencing off a portion of the Rosebud River to reduce bank erosion due in part to livestock impacts. "The farmers decided to put up a fence in 2000 and then leave that riparian pasture to rest in 2001. Even though it was a drought year, the amount of grass that grew back was just incredible. Even the areas that were heavily eroded and impacted by cattle are nicely grassed over now." So, along with protecting water quality, "the farmer is going to have a tremendous riparian pasture next year, and he's protecting his banks so he's no longer losing land in that stretch."

The group's willingness to address agricultural impacts is starting a trend among other stakeholders. Lewis, who is also assistant agricultural fieldman for the County, says, "A good example is the Town of Carstairs which is very much involved in the group. They are doing what they can as a town to minimize their impact on the waterways. We hope to build relationships with other stakeholders, so all the stakeholders in the County are working together to minimize whatever impacts we all may have."

Major partners in the group's activities include Mountain View County, the Foothills Forage Association, Cows and Fish, Alberta Conservation Association, Ducks Unlimited, PFRA and Alberta Agriculture.

For more information on this group, contact Ken Lewis, phone: 403-335-3311; email: klewis1@telusplanet.net

Ken Lewis/Mountain View Waterways Restoration Group



Demonstration sites provide practical, local examples of riparian management options

Changing Practices & Changing Views in the North West



A multi-agency project compares alternative methods of manure management.

Ecomark Ltd.

In the North West Region, producers have taken valuable steps forward in environmental stewardship. "Seeding practices, cropping practices have changed greatly, becoming much more environmentally sustainable. We see a lot of improvement in grazing practices. And people are starting to address manure management concerns such as phosphates, runoff and wintering sites," says Charles Rypien, chair of the North West Farm Based Committee.

Although change is underway, more is still to be done in this region that stretches from the Edmonton area west to the mountains and north to Lesser Slave River. Says Rypien, "We need to continue to work on grazing practices to reduce overgrazing and under-utilization. We also have a long way to go on making sure

we have adequate, clean, good water. And the manure management process still has to be worked on."

"Our biggest challenge [is] to get people to understand that everything they do affects the environment."

More fundamentally, he sees the need for a changed perspective. "We're such a large region with a sparse population and a lot of small farms. Everyone seems to think, 'Who me? I'm not hurting the environment.' That's going to be our biggest challenge: to get

people to understand that everything they do affects the environment."

Alberta Agriculture's conservation technologist in Barrhead, Tara Golby, says the recent low precipitation levels also present challenges. "For livestock producers, maintaining adequate supplies of good quality stock water is a growing issue, and good grazing management is more essential than ever. For crop producers, the need to reduce the number of tillage passes became obvious last year when winter winds blew topsoil from bare fields."

For information on the AESA Farm Based Program in the North West Region, call Tara Golby at 780-674-8225, or Janet Dietrich and Kathy Reid at 780-632-5466.

Excited about rotting things?

A project north of Edmonton is aiming to demonstrate simple, low-cost and environmentally sound methods for managing manures from confined feeding operations. The key is composting.

Increasing concerns over odour and water contamination from manure along with the challenge of a reduced land base for manure spreading have sparked the interest of local producers in this multi-agency project.

"Alternative methods of manure management have become imperative," says Mark Polet, President of Ecomark Ltd.

The project started when Northlands Park asked Ecomark to find ways to manage the bedding from Northlands' racetrack and agricultural shows. Since then the project has expanded as new partners have come on board. The partners now include Ecomark,

Prins Feedlot, County of Sturgeon, Alberta Agriculture, Food and Rural Development and AESA, Northlands, Agrium, Norwest Labs, the University of Alberta and Agricore.

The project has two main components. One is to compare composting of various mixtures of beef, chicken and pig manures, the bedding material and phosphogypsum (a product that may improve composting). The other is to apply the finished composts at various rates to farm fields. The partners are collecting data on such aspects as composting rates, crop yields and economics.

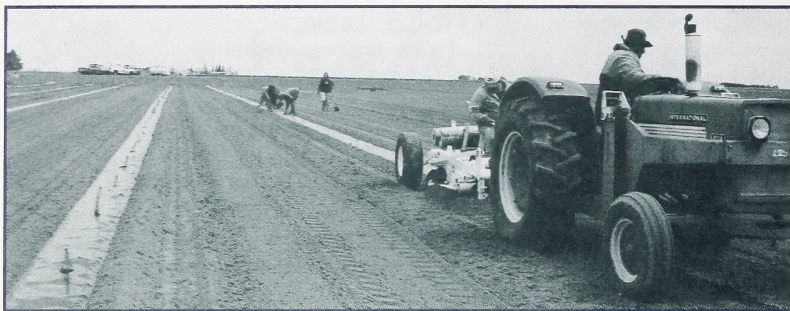
"The Northlands' bedding material, primarily made of straw and wood chips with a bit of horse urine and droppings, is extremely high in carbon, whereas manures are generally quite high in nitrogen. For composting, the optimum ratio is about 30 to 1 of carbon to

nitrogen," explains Polet. By mixing these two sources, the project team can reach that ratio.

Polet says composted manure offers many advantages over raw manure. The roughly 75% reduction in volume makes composted manure much less expensive to haul. It is drier, less smelly and less prone to leaching and runoff problems, and the composting process kills weed seeds and disease-causing organisms. Compost also greatly increases the soil's nutrient-holding capacity. And there's the potential for a value-added product: bagged compost for home gardeners. "We're pretty excited about rotting things!" he adds.

Plans for the coming years include continuing the demonstration project and more communication with farmers, including courses, annual tours, a manual, and a publication on the economics of composting. As well, Dr. Jerry Leonard at the University of Alberta will be developing rigorous, quantitative laboratory data on composting.

For more information, contact Mark Polet, phone: 780-444-0706, email: mpolet@ecomarkenv.com or visit the Ecomark website at www.ecomarkenv.com



EID Partners in Habitat Development Program assists landowners to establish multi-row shelterbelts of trees and shrubs.

Candice Buteau/EID PHD

Balancing Economic & Environmental Challenges in the South

Reaching from the Calgary area down to the Montana border, the South Region faces many challenges to sustainability. Issues like feedlot manure and odour management, water quality, grazing management and soil erosion have been made more severe by economic pressures and drought. In the face of these complex concerns, the people in the region are coming up with inventive solutions.

The new chair of AESA's Southern Farm Based Committee, Lynden Hutchinson, says the Farm Based Program plays a vital role in helping producers learn about options to address environmental concerns. "It's important to use as many ways as possible to transfer the latest sustainable technology, research and information into the hands of farmers and ranchers so they can see if it would work in their particular situation."

Hutchinson, who farms about 20 miles west of Foremost, emphasizes that the practices have to make economic sense. Although many producers recognize the long-term economic benefits of environmentally friendly practices, the costs of implementing the changes can slow adoption.

The Farm Based Program in the South is addressing economics in two main ways, says regional conservation coordinator Dale Chrapko. "First, AESA is encouraging municipalities to form partnerships to hire

specialists or coordinators. These specialists could talk one-on-one with producers about management practices and economics. The specialists could learn from the producers who are making money from sustainable options and tell other producers. For example, some of our top producers are making a better profit from timothy than from specialty crops like potatoes and sugar beets that require a lot of tillage and can lead to serious soil erosion problems."

**"Specialists could talk
one-on-one with producers
about management practices
and economics."**

The second way is by partnering with groups that assist individual producers with their stewardship projects. Explains Chrapko, "A good example is the Eastern Irrigation District's Partners in Habitat Development program. Along with essential advice and information, the program can also help with materials and labour for land management practice change on a producer's land." (see box right)

For more information on AESA Farm Based projects in the South Region, contact Dale Chrapko; phone: 403-381-5117 email: dale.chrapko@gov.ab.ca.

'One-stop shopping' approach for habitat initiative

"One of the Partners in Habitat Development [PHD] program's strong points is that it is a partnership. Within the Eastern Irrigation District's program, we have a close working relationship with the County of Newell and its ag fieldman, Ducks Unlimited, Pheasants Forever, the local Fish and Game group, the Alberta Conservation Association, the people at Alberta Agriculture research centre [in Brooks], Alberta Fish and Wildlife, and PFRA. So it creates an umbrella for several agencies, and the landowner has a one-stop shopping approach," says Rick Martin, Wildlife Projects Manager for the Eastern Irrigation District (EID).

This "one-stop shopping" includes assistance in both planning and implementing a landowner's project. A PHD wildlife technician meets with an interested landowner to develop plans for habitat or environmental improvements. While providing habitat expertise, the technician can also link the landowner to other expertise in the partner agencies. And the program provides materials and labour to help implement the landowner's plan. Projects include shelterbelt plantings, buffer strips, fencing to protect habitat, wetland enhancement, and winter wildlife food programs. Wherever possible, the projects provide agricultural benefits such as improved cattle shelter and reduced wind erosion.

The landowners are willing contribute their own time, effort, equipment and land. Martin says, "A lot of the sites are on irrigated farmland that they used for production in the past. There's a pretty good dollar value for irrigated land, and these folks are setting aside two, three, five acres for their projects."

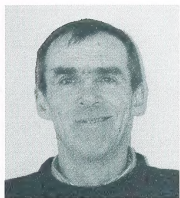
This popular program, which started in the EID in 1998, involves both irrigated and dryland cultivated land. Now the program is expanding into Alberta's 12 other irrigation districts, bringing in many new partners and landowners.

Martin foresees a strong link between the PHD program and AESA's increased emphasis on manpower. "If the counties have conservation staff working with farmers to come up with farm conservation plans, then where there's a wildlife or environmental component along our lines, the counties' technicians can bring our people in to help design that component." The result: an even greater one-stop shopping experience for southern farmers.

For more details, contact Rick Martin, phone: 403-362-1414; email: wildlife@eidnet.org

Charles Rypien

"Environmental sustainability for a farmer has to have some economic viability. Programs and actions have to make economic sense as well as environmental sense. I think that's a real issue that has to be looked at whenever we start coming up with new programs or new ideas," says Charles Rypien.



Roger Bryan/AARFD

Rypien knows first-hand about the crucial importance of practical, economically sound approaches to stewardship. The Rypiens have a beef and grain farm in the Athabasca area. They use a variety of practices to minimize their impact on the soil and water resources, such as direct seeding, herbicide rotations, rotational grazing, and improvements to watering sites.

On AESA Council, Rypien represents the North West Farm Based Committee. He says, "The North West is a large, diverse region undergoing significant changes. We have many small farms with income derived from off-farm employment. A lot of the region is next to the Green Area, so there's interaction between recreational uses and agriculture. So I think we are probably noticed more than some of the big farms in some areas. Yet we are changing from small farms to big farms. And we're losing our old farmers to younger farmers."

He says these trends make the technology transfer activities funded by the Farm Based Program vital for the region. "By using on-farm demonstrations, meetings, tours and one-on-one consultations, we can spread the information and research."

"The environment is where we live."

Rypien is also a member of the AESA committee working with the Chair in Environmentally Sustainable Agriculture at the University of Alberta. He says, "The importance of the chair at the university is to get pertinent research brought together under one umbrella and to make it deliverable to students, farmers and industry, and to people who live in urban centers. We have to start with the young kids, and we also have to deal with urban people that may or may not know what agriculture is about. They need to have clear and targeted information on what's happening in agriculture and why it happens."

Before chairing AESA's North West Committee, Rypien served on a similar committee for the previous federal-provincial program in environmentally sustainable agriculture. This long-standing involvement reflects his commitment to addressing environmental issues. "The environment is where we live. It's very important that we have a healthy environment so we can have healthy lifestyles."

John Tackaberry

For John Tackaberry, stewardship is a matter of the head and the heart. He says, "Each generation is charged with the responsibility of leaving the soil and water resources in as good as or better condition than when they took over. If we can minimize our "footprints" on the soil and water, we leave our children and our grandchildren in a much better position to be able to make a living from the land and to continue this conservation legacy. It is a sacred trust."



Roger Bryan/AARFD

"The AESA Council and Program provides considerable leadership and focus on what needs to be done."

Tackaberry represents Alberta Agriculture, Food and Rural Development on AESA Council. He has been with the department for 31 years, starting as a district agriculturist and becoming a regional director and then a division director. He is currently director of Resource Management and Irrigation, the division administratively responsible for the AESA Program.

"The AESA Program provides significant provincial core funding for the development, packaging and transfer of information and technology in areas such as soil and water conservation, nutrient management, grazing/riparian management, improved air quality, enhanced habitat and biodiversity, and processing." Although AESA funding is not the only Alberta Agriculture money directed towards environmentally sustainable agriculture, "the AESA Council and Program provides considerable leadership and focus on what needs to be done," he explains.

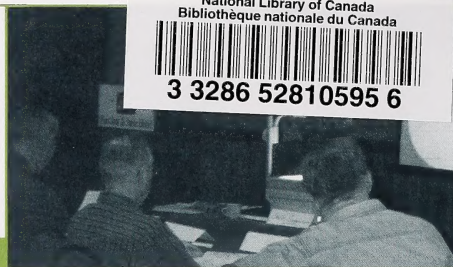
Being a member of AESA Council is "one of the highlights of my job," he says. "They are a dedicated group. We have some great discussions and debates, and some differences of opinion from time to time. This open debate is the sign of a healthy Council."

Tackaberry is involved in many other groups dealing with agricultural and environmental issues. For example, he chairs a departmental committee on environmentally sustainable agriculture. He represents Alberta Agriculture on a cross-ministry group developing a provincial water management strategy, and he's a member of the Irrigation Council. He also serves on committees concerning greenhouse gases and climate change, and is a member on the Alberta Crop Industry Development Fund.

He believes stewardship is essential. "Society is demanding that all industries be accountable and minimize their impact on the environment. Agriculture is no exception. This is a challenge that our industry can meet."

Linking the Farm Based Program to Individual Needs

Pilot testing of the environmental farm plan process.



Roger Bryan/AARFD

"The environmental farm plan is a farmer-directed, risk assessment process that raises awareness, educates and leads to action."

An industry-led initiative to be launched next fall will complement the strengths of the Farm Based Program. Called the Environmental Farm Plan (EFP) program, it will provide a way for individual farmers and ranchers to determine what changes, if any, are needed in their own operations. Then the Farm Based Program can provide the technical follow up (such as workshops, demonstrations, manuals and manpower) to help them assess their options for these changes and implement the changes.

"The EFP is a farmer-directed, risk assessment process that raises awareness, educates and leads to action," explains AESA Council member John Kolk. In January 2001, AESA Council approved a proposal to develop this voluntary, confidential self-assessment program for Alberta. In the EFP process, a producer uses a series of checklists to identify any areas of environmental risk in his operation and develops an action plan to address these risks. The plan is his own: he designs it, he decides who can see it, and he determines how he will implement it, setting his priorities and timelines to mesh with his individual needs.

Kolk, a producer from the Picture Butte area, chairs the EFP steering committee. "The committee includes a really broad range of groups from the legislative and funding side, to the commodity groups and general farm group side, to the people involved in landscape issues. It takes a bit longer with such a large group, but the product will be just so much broader and deeper than if only a few groups were involved."

The steering committee and its working group are developing the EFP process, with a binder adapted to Alberta's needs and producer-led workshops to introduce the process. Pilot testing of the binder and the delivery method is underway.

"I can see the EFP and the Farm Based Program connecting in a lot of different ways," says Kolk. For instance, EFP workshop leaders may notice that participating producers need more information on livestock watering options. The workshop leaders could pass that information on to groups involved in the Farm Based program so they could address that information need.

Another possible link is through the increased manpower available with the recent changes to the AESA Farm Based Program. A full-time conservation person could advise individual farmers on options to address concerns identified in their EFPs and could link them to other information sources or to agencies that fund individual projects.

Kolk is one of the producers taking part in the pilot workshops. "Personally, I'd like to do an environmental assessment to understand where I have high risks in my farming operation when it comes to the environment." He says other reasons to prepare an EFP include: demonstrating to the public, governments, lenders and/or investors that they are managing their own environmental risks; showing that the industry is able to regulate itself, thereby reducing the need for government regulations; and, of course, protecting the environment.

For more information, contact John Kolk phone: 403-732-4384; email: jpkolk@telusplanet.net or Therese Tompkins of Alberta Agriculture phone: 780-427-3588; email: therese.tompkins@gov.ab.ca

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Green Matters is the newsletter of the Alberta Environmentally Sustainable Agriculture (AESA) Council. AESA Council consists of 29 representatives from Alberta's agriculture and food processing industry, environmental organizations and government. Its mandate is to: identify and evaluate environmental issues facing Alberta's agriculture and food processing industry; encourage the industry to proactively address these issues; advise the Alberta Minister of Agriculture, Food and Rural Development on these issues; and direct the AESA Program.

The purpose of Green Matters is to provide a forum for discussion of environmental issues in Alberta's agriculture and food processing industry.

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